

**STRATEGIES, SPECIFIC OBJECTIVES,
AND
EVALUATION INSTRUMENTS**

***CLINICAL EDUCATION
I THROUGH VI***

DEPARTMENT OF RADIOLOGIC TECHNOLOGY

RADIOGRAPHY PROGRAM

CASPER COLLEGE

2022-2023

Revised December 2022

TABLE OF CONTENTS

<i>TABLE OF CONTENTS</i>	2
Introduction to Casper College Radiography Program - Clinical	3
Strategy I: Simulation Labs and Evaluations	7
Strategy II: Procedure Log Book.....	11
Strategy III: Clinical Competency Evaluations	12
Strategy IV: In-Service Education.....	18
Strategy VI: Review/Rotation Activities and Skills	22
Strategy VII: Specialty Imaging Rotations/ Multiple facilities with a variety of advanced modalities	22
Strategy VIII: Strategy Student Assessment / Technologist Evaluation	22
STRATEGY IX: Final competency	33
Strategy X: CLINICAL EDUCATION ROTATION KEY- Revised 01/10.....	35
Clinical Education Sites	37

Introduction to Casper College Radiography Program - Clinical

General Clinical Description

There is a sequence of six clinical education courses providing the student with practical learning opportunities and experiences in the medical radiography environment. The student is required to participate at pre-scheduled time periods to carry out important strategies and specific objectives outlined in this manual. All activities of the student in the clinical environment will be directly supervised 100 percent until competency is achieved by the student through testing conducted by the clinical education coordinator/clinical instructor or program director in conjunction with staff radiographers at the clinical affiliate sites. After successful completion of a competency examination on a radiographic procedure the student may perform the patient exam with indirect supervision, except during a repeat exposure. (See program policies for definitions of direct and indirect supervision)

Specific Strategies

The process of clinical education involves the student working through specific objectives, which are directly tied to ten clinical education strategies. These strategies are designed to develop in the student radiographer the knowledge, skills, attitudes, and values associated with becoming competent at the "entry-level" in the profession of medical radiography. The curriculum is integrated so the student can gain the knowledge and experience in the classroom and lab setting necessary to be successful in the clinical education area. See Figure 1, illustrating integration of didactic and clinical curricular components.

Figure 1

Casper College Radiography Program Integrated Curriculum- Revised 12-22

**Summer I
8 cr. (8 wks)**

		Clinical Ed I									
Curriculum	CR	Strategy I Simulation Lab	Strategy II Procedure Log	Strategy III Competency	Strategy IV In-service	Strategy V Quality	Strategy VI Clinical Activities	Strategy VII Multi-skilling	Strategy VIII Student	Strategy IX Impromptu	Strategy X Final
RDTK 1500 Intro. Rad Tech.	1	Chest, Abdomen,	Must be kept current and on student's person at all times.	Documentation of entry-level competencies in each of the required areas.	Clinical Site Orientations, fire/electrical safety, surgery, vital signs and patient assessment, infection control, O2 administration DR/CR, HSSC orientation	Technique manuals	Complete assigned rotation and review skills	Patient Site O2 administration EKG, IV Patient Care Procedures	Final supervisory evaluation, final grade determination, rotation evaluation	NA	NA
RDTK 1530 Care & Mgmt.	2	Hand, Finger, Wrist,									
RDTK 1580 Rad. Positioning	3	Forearm, elbow, vital, signs, oxygen administration									
RDTK 1710 Clin. Ed. I	2	Body Mechanics									

**Fall I – 13/15 cr.
(15 wks)**

		Clinical Ed II									
Curriculum	CR	Strategy I Simulation Lab	Strategy II Procedure Log	Strategy III Competency	Strategy IV In-service	Strategy V Quality	Strategy VI Clinical Activities	Strategy VII Multiskilling	Strategy VIII Student	Strategy IX Impromptu	Strategy X Final
HLTK 1200 Med. Term	3	humerus, scapula,	Must be kept current and on student's person at all times.	Documentatio n of entry- level competencies in each of the required areas.	C-arm Code Blue Vital signs DEXA Scanning DR/CR	Technique manuals	Complete assigned rotation and review skills	Patient Care Skills EKG Venipuncture	Midterm & final supervisory evaluations, final grade determination, rotation evaluation.	Random Simulations	Final clinical positioning and image critique exam
ZOO 2010 A & P I	4	shoulder, AC jts, clavicle,									
RDTK 1610 Rad Imaging II	5	sternoclavicular joints									
RDTK 1680 Positioning II	3	Foot, toe,									
RDTK 1810 Clin. Ed. II	3	Calcaneus Ankle, lower									
RDTK 1830 Pharmacology	1	leg, knee, patella, femur, hips, pelvis, SI jts.									

**Spring I – 12 cr.
(15 wks)**

		Clinical Ed. III									
Curriculum	CR	Strategy I Simulation Lab	Strategy II Procedure Log	Strategy III Competency	Strategy IV In-service	Strategy V Quality	Strategy VI Clinical Activities	Strategy VII Multiskilling	Strategy VIII Student	Strategy IX Impromptu	Strategy X Final
ZOO 2020 A&P II	4	gastrointestinal, gall bladder,	Must be kept current and on student's person at all times	Documentatio n of entry- level competencies in each area.	C-arm Cont. venipuncture module, vital signs, digital fluoroscopy and radiography, special procedures, specialty areas DR/CR	Technique manuals	Complete assigned rotation and review skills.	EKG, Venipuncture	Midterm & final supervisory evaluations, final grade determination, rotation evaluation.	Random Simulations	Final positioning and image critique exam
RDTK 1640 Rad. Imaging	5	ERCP, barium enema, IV									
RDTK 2580 Positioning III	2	pyelogram, cystogram, HSG,									
RDTK 1910 Clin. Ed III	3	C-T-L spine,									
HLTK 2200 SECT. Anat.	3	coccyx, sacrum, sternum, thorax									

**Summer II–5-7
Cr. (8 wks)**

PE	1	Surgical	Must be kept	Documentatio	C-arm, surg	x-ray	Complete	EKG,	Final supervisory	Impromptu	NA
Comp Sci/Literary	2-	procedures,	current and on	n of entry-	asepsis,	equip,	assigned rotation	Venipuncture	evaluations, final	evaluations	
Elective	4	arthrogram,	student's	n level	specialty	image	and review skills.		grade	[refer to	
RDTK 2710 –	2	myelogram, CT,	person at all	competencies	rotations, oxygen	quality, etc			determination,	syllabus]	
Clin. Ed. IV		O ₂ and infection	times	in each of the	administration,				rotation		
		control		required	infection control,				evaluation.		
		Body Mechanics		areas.	orthopedics, vital						
					signs, dexiscan						
					DR/CR						

Clinical Ed IV

**Fall II – 15.5 cr.
(15 wks)**

ENGL 1020 English	3	skull, facial bones,	Must be kept	Documentation	C-arm/Portable	x-ray equip,	Complete	Nurse	Midterm &	Impromptu	Final
II		nasal bones,	current and	of entry-level	review	image	assigned rotation	EKG,	final	evaluations	positioning
POLS1000 US/WY	3	optic foramina,	on student's	competencies in	QA projects	quality, etc	and review skills.	Venipuncture	supervisory	[refer to syllabus	and film
Govt		orbits, mandible,	person at all	each of the	Orthopedic				evaluations,		critique
RDTK 2640 Rad.	2	TMJ, sinuses,	times	required areas.	rotations				final grade		exam
Bio & Prot		mobile/trauma and			Vital Signs				determinatio		
RDTK 2630 Rad.	3	surgical procedures,			Venipuncture				n, rotation		
Path		Pediatric			Review				evaluation		
RDTK 2810 Clin Ed	5	Specialty Rotations			Specialty Areas in						
V					Imaging						
					DR/CR						

Clinical Ed V

**Spring II – 14
cr. (15 weeks)**

Curriculum	CR	Strategy I Simulation Lab	Strategy II Procedure Log	Strategy III Competency	Strategy IV In-service	Strategy V Quality	Strategy VI Clinical Activities	Strategy VII Multiskilling	Strategy VIII Student	Strategy IX Impromptu	Strategy X Final
FA/Soc. Behav/Hum	3	Review sessions,	Must be kept	Documentation of	Immobile &	x-ray equip,	Complete	Nurse	Midterm &	Impromptu	Final
PE	1	trauma radiography,	current and on	entry-level	trauma,	image	assigned rotation	EKG,	final	evaluations	Q/A of x-
RDTK 2910 Clin Ed.	2	Contrast studies,	student's	competencies in	pediatric,	quality, etc	and review skills.	Venipuncture	supervisory	[refer to	ray
RDTK 2930		pediatric studies,	person at all	the remaining	specialty				evaluations,	syllabus	,etc. final
Transition from	5	orthopedic studies,	times	required areas.	rotations				final grade		competen
Student to		specialty rotations			continued				determination,		cy
Radiographer					Vital Signs				rotation		Positionin
					DR/CR				evaluation		g
											competen
											cy exam

Clinical Ed VI

Total Length of Program: 24 Months

Degree Awarded: Associate of Science



Strategies for Success

Strategy I: Simulation Labs and Evaluations

Every semester for a clinical education course, the student will be required to become entry level competent in a specific number of radiographic procedures, including portable, trauma, and pediatric studies. The radiographic procedures and skills to be emphasized for Clinical Education are:

Clinical Education I

- Chest
- Abdomen
- Digit (upper)
- Hand
- Wrist
- Forearm
- Elbow
- Vital Signs
- Oxygen Administration
- Body Mechanics
- Medical Asepsis

Clinical Education II

- Humerus
- Shoulder
- Clavicle
- SC Joints
- Scapula
- AC Joints
- Toe
- Foot
- Calcaneus
- Ankle
- Tib/Fib
- Knee
- Femur
- Hip
- Pelvis
- SI Joints

Clinical Education III

- Digital Fluoroscopy
- Barium Swallow
- UGI
- Barium Enema
- IVP with tomograms
- HSG
- Cystogram
- ERCP
- Sternum
- Thorax
- C-Spine
- T-Spine
- L-Spine
- Sacrum/Coccyx

Clinical Education IV

- Digital Radiography
- Myelogram
- Arthrogram
- CT Procedures
- Pediatrics
- Oxygen Review
- Dexiscan

Clinical Education V

- Trauma Studies
- Surgical Procedures
- Skull
- Facial Bones
- Nasal Bones
- Orbits
(optic foramina)
- Mandible
- TMJ's
- Sinuses

Clinical Education VI

- Immob/Trauma Studies
- Review Sessions
- Contrast Study Simulation of
Imaging Projections

Sequence of Courses

The first step towards developing these clinical competencies is to have the proper prerequisite knowledge. The student must have either previously completed or be concurrently enrolled in the following courses for that particular semester:

Clinical Education I

RDTK 1500	Introduction to Radiologic Technology
RDTK 1530	Patient Care & Management
RDTK 1580	Radiographic Positioning I
RDTK 1710	Clinical Education I

Clinical Education II

RDTK 1610	Radiographic Imaging I
RDTK 1680	Radiographic Positioning II
RDTK 1810	Clinical Education II
RDTK 1830	Pharmacology for Radiographers

Clinical Education III

RDTK 1640	Radiographic Imaging II
RDTK 2580	Radiographic Positioning III
RDTK 1910	Clinical Education III
HLTK 2200	Sectional Anatomy

Clinical Education IV

RDTK 2710	Clinical Education IV
-----------	-----------------------

Clinical Education V

RDTK 2640	Radiographic Biology & Protection
RDTK 2810	Clinical Education V
RDTK 2630	Radiographic Pathology

Clinical Education VI

RDTK 2910	Clinical Education VI
RDTK 2930	Transitions from Student to Radiographer

The second step for developing clinical competencies is to have the student participate in a clinical simulation lab in which the radiographic "departmental" routine for each of the previously identified procedures are simulated. The clinical education coordinator will conduct simulations with students for a period of time required to completely orient the students to the departmental routines. Students are given three minutes to complete each projection of the given exam.

The RADIOGRAPHIC DEPARTMENT ROUTINES reference contains all of the basic radiography routines for the radiology department of each clinical location. The clinical education coordinator will use this reference to qualify specific aspects of the simulation unique to the radiography department. Protocols from other clinical facilities will also be discussed for the simulation process.

Once the student has participated in a simulation laboratory he or she is encouraged to become familiar with the departmental routine for any radiographic procedure simulated. The student is given approximately one week to practice the procedures from the simulation under direct supervision in the clinical setting (See program policy manual for definition of direct supervision). He or she may also practice using phantoms or colleagues when there are slow periods within the department. Under no condition will the student make actual radiographs on colleagues. And, with permission of the instructor, the student will be allowed to make radiographs using phantoms. After one week of practice, the clinical education coordinator will conduct an evaluation of the student's understanding and application of the departmental routine for that specific radiographic procedure. Each evaluation of a simulation is standardized so that an objective grade may be obtained on the student's performance rating of his or her simulation using the standardized form as identified in Figure 2, which follows. The student must score 85% or better on the simulation test. If the student scores below 85%, they must repeat the simulation exam before performing a competency in the clinical setting. In this case both grades will be averaged. The student must perform all exams on patients with direct supervision until they have passed a competency on that specific exam. (See strategy III, and Program Policy in regard to direct/indirect supervision policy)

At the completion of each clinical course the student will perform a final simulation exam. The exam will cover all procedures reviewed during simulation classes for that semester. The student will be evaluated using the same tool as identified in figure 2. The exam will also include film critique as well as questions pertaining to the material covered during the course.

FIGURE 2

CLINICAL LAB SIMULATION/EVALUATION

STUDENT NAME _____ DATE _____ CLINICAL EDUCATION I II III IV V VI (circle one)

RADIOGRAPHIC PROCEDURE: _____ RADIOGRAPHIC PROJECTION: I. _____ II. _____

III. _____ IV. _____ V. _____ VI. _____

VII. _____ VIII. _____

COMMENTS:

	I	II	III	IV	V	VI	VII	VIII	
OID/SID									
POSITION									
CENTERING									
COLLIMATION									
RAD. PROTECT.									
FILM SIZE & PLACEMENT									
MARKER PLACEMENT									
JUDGEMENT/ORG. problem solving									
WORKING SPEED									
EQUIP. MANIPULATION									
TECHNIQUE									
TOTAL									TOTAL

SCALE OF ACHIEVEMENT

- No deduction = Meets Entry Level
- 5 = Minor Improvement Necessary
- 8 = Major Improvement Necessary
- 10 = Not Acceptable
- 30 = Repeat Would Have Been Inevitable

EVALUATION FORMULA

Grade = $\frac{\text{TOTAL}}{30 \times \# \text{ Projections}} = \underline{\quad} = \underline{\quad} \%$

I certify that above student has/has not (*circle one*) completed the Clinical Lab Simulation for the above radiographic procedure.

SIGNED _____ DATE _____ SIGNED _____ DATE _____

(Clinical Instructor)

(Student)

Specific Objectives of Simulation Activities

The simulation laboratories and evaluations for any given clinical education course are implemented based on the following specific clinical objectives:

Given the radiographic procedures for each Clinical Education rotation, as identified in Strategy I, the student will be able to demonstrate such procedures as they relate to departmental routines with "above average achievement", utilizing the following objectives:

Objectives: Under simulated radiographic conditions, the student will be able to:

1. Correctly select the proper object to image receptor distance and source to image receptor distance.
2. Correctly position the part to be radiographed in its proper relationship to the tube and image receptor.
3. Correctly place the central ray for each projection.
4. Correctly cone-down or collimate to the part being radiographed.
5. Correctly apply radiation protection measures to protect both patient and operator.
6. Correctly select the appropriate IR (image receptor) and place it in its proper relationship to the part being radiographed.
7. Correctly select and place identification markers and/or directional markers on IR, or in field of view (FOV), so those markers will be readable to the radiologist.
8. Correctly execute appropriate judgment in situations where the patient or equipment or both are atypical. Correctly organize the radiographic room and prepare the radiographic equipment for the proper execution of the radiographic procedure.
9. Correctly complete each radiographic projection (of moderate difficulty) with an average of 3 minutes per projection.
10. Correctly maintain appropriate patient-technologist relationships that are designed to maximize cooperation for the proper delivery of patient care in the process of achieving a maximally diagnostic radiographic study.
11. Correctly select technical factors for the projections.

*Minimum Achievement Level

In case the student does not attain 85% on the first try, he/she will continue to redo the simulation until performing the exam at a level of 85% or greater.

Strategy II: Procedure Log Book

Each student will keep a procedure log of all exams assisted or performed by the student. The student must complete the logbook at all clinical sites. Any repeat exams must be documented in the log and supervision of repeats verified by the supervising technologist (preceptor must initial repeats in the Repeat Image Evaluation section of the procedure log).

Strategy III: Clinical Competency Evaluations

As was stated previously, the final level of progress towards achieving entry-level competencies for the radiographic procedures identified in this syllabus is achieved when the student is certified competent via a performance evaluation on a particular radiographic procedure(s) being emphasized that semester. Once the student has successfully performed a simulated radiographic procedure, the student is eligible to receive a clinical competency evaluation from the clinical coordinator/clinical instructor or his/her designate (only technologists who are ARRT certified may conduct clinical competency exams). The nature of the clinical competency evaluation will pertain to specific clinical objectives for the production of diagnostic quality radiographs under authentic patient care situations. Only in designated situations will a competency evaluation be conducted under less than "authentic patient care" conditions. In such situations, phantoms or role models may be used to simulate "authentic" conditions. And, only during the use of phantoms in these simulated situations, will actual radiographs be authorized to be produced. The student is also required to perform competency exams in specified areas to include trauma, surgery, pediatric, and geriatric radiography. Once the student has passed a competency for a specific exam, he/she may perform the exam under indirect supervision. (see radiography policies for definition of indirect supervision)

Specific Objectives: Clinical Competency Evaluations

The radiography faculty of Casper College feels six essential areas are necessary for the production of quality radiographs regardless of the radiographic procedure. They include factors that influence the selection of radiographic technical factors, positioning, patient care and ethics, radiation protection, communication and organizational skills. Students will be evaluated competent at the entry-level when they meet the criteria for the following specific clinical education objectives.

Once the student has made arrangements to have a clinical competency evaluation conducted by the clinical education coordinator/clinical instructor or supervisor, the CLINICAL COMPETENCY EVALUATION INSTRUMENT as illustrated in Figure 3 (pp. 16 and 17) will be used to rate the performance of a student with respect to the following clinical educational objectives:

I. RADIOGRAPHIC TECHNICAL FACTORS:

RADIOGRAPHIC TECHNIQUE: mAs/Density Setting

Given a reference source, (technique charts, references, information from RT's, etc.,) the student will select the required mA and exposure time factors, or the required density selection(s) in relationship to ionization chambers, with above average achievement*:

RADIOGRAPHIC TECHNIQUE: kVp

Given a technique reference, the student will be able to select the optimum kVp required for adequate penetration of the part and production of diagnostically acceptable radiograph(s) with above average achievement*.

RADIOGRAPHIC TECHNIQUE: Focal spot size (FSS) Selection

Given a minimum amount of voluntary/involuntary patient motion, etc., the student will be able to select the appropriate focal spot as to provide for a maximum amount of image clarity (sharpness of detail or definition) in the production of a diagnostically acceptable radiograph(s) with above average achievement*.

RADIOGRAPHIC TECHNIQUE: Source to Image Distance (SID)

Given a typical radiographic projection the student will select the source to image distance within 5% of the required SID.

II. POSITIONING

RADIOGRAPHIC POSITIONING: Object to Image Distance (OID)

Given a specific radiographic examination and projection the student will position the part as to minimize the object film distance so that magnification is kept to a minimum and sharpness to a maximum with above average achievement*.

RADIOGRAPHIC POSITIONING: Tube Angulation

Given a specific radiographic examination and projection the student will correctly angle the tube in direction and angulation as to minimize distortion with no error.

RADIOGRAPHIC POSITIONING: Position

Given any patient to be radiographed, the student will correctly identify and place the required anatomical part in the proper radiographic position for the desired radiographic projection with above average achievement*.

RADIOGRAPHIC POSITIONING: Centering

Given the correct positioning of any anatomic part to be radiographed, the student will properly center the part to be radiographed to the central ray of the x-ray beam and properly center the part to the film or table bucky arrangement for the production of diagnostically acceptable radiograph(s) with above average achievement*.

RADIOGRAPHIC POSITIONING: Image Receptor size, Field of View, and Placement

Given any type of radiographic examination/projection to be performed in the radiology department, the student will correctly identify and select the proper IR size, or field of view, required and place it in its proper relationship to the part being radiographed with above average achievement*.

RADIOGRAPHIC POSITIONING: Marker Placement

Given any radiographic study/projection to perform, the student will correctly (readable) place the required identification or directional markers in the field of view NOT obscuring important diagnostic information of the anatomical part to be radiographed with above average achievement*.

III. PATIENT CARE AND ETHICS

PATIENT CARE AND ETHICS:

Respects patient's rights as an individual. Treats each patient the same without bias.

PATIENT CARE AND ETHICS:

Performs within professional scope of practice.

PATIENT CARE AND ETHICS:

Applied proper patient care techniques.

PATIENT CARE AND ETHICS:

Obtained complete patient history - obtained complete history appropriate to exam.

PATIENT CARE AND ETHICS:

Request was filled out properly. Student understood how to dismiss patient to proper location (ER, OP, etc.).

IV. RADIATION PROTECTION

RADIATION PROTECTION: Gonadal protection
Patient was shielded properly for exam being performed.

RADIOGRAPHIC PROTECTION: Collimation

Given any radiographic machine with or without automatic collimation, the student will properly collimate the radiation beam inside the border of the film holder being used or the student will collimate appropriately enough to the part being radiographed to minimize scatter (fogging) and maximize radiation protection aspects in the production of diagnostically acceptable radiograph(s) with above average achievement*.

V. COMMUNICATION SKILLS

COMMUNICATION SKILLS:

Student explained exam, breathing technique and positioning instructions in a clear and confident manner.

COMMUNICATION SKILLS: Attitude and Initiative

Student presented a positive attitude toward performing the exam.

COMMUNICATION SKILLS: Demonstrate Confidence

Student projected an attitude of confidence that is designed to maximize patient cooperation during the procedure.

VI. ORGANIZATIONAL SKILLS

ORGANIZATIONAL SKILLS: Room Ready For Exam

The radiographic room was set up for the appropriate exam being performed prior to the patient's arrival.

ORGANIZATIONAL SKILLS: Equipment Manipulation

The student was able to use the appropriate equipment for the procedure with little difficulty.

ORGANIZATIONAL SKILLS: Work Speed and Efficiency

Given ample time for each radiographic projection under normalized conditions, the student will complete the entire radiographic procedure with above average achievement*.

ORGANIZATIONAL SKILLS:

Room clean and ready for next patient.

ORGANIZATIONAL SKILLS:

Utilized critical thinking and problem solving skills appropriate for clinical level of student.

*Minimum Achievement Level

In case the student does not attain 85% on the first try, he/she will continue to retake the competency until performing the exam at a level of 85% or greater.

Competency Film Critique Evaluation

After successful completion of each competency exam the student will be required to review and critique the exam performed utilizing the Clinical Education Competency Exam Image Evaluation form. The form covers the following areas:

1. Protocol/technical factors
2. Patient history
3. Changes needed due to patient condition
4. Areas student identifies for improvement
5. Clinical outcome of the exam
6. Critique of images in the following areas:
 - a. Density/Brightness
 - b. Contrast
 - c. Detail
 - d. Distortion
 - e. Positioning
 - f. Collimation
 - g. Artifacts
 - h. Patient ID/Side markers

The student should be prepared to review the images and discuss their critique with the clinical instructor.

Clinical Competency Evaluation

Question 1 Prepares exam room for patient.

- True
- False

Question 2 Evaluates exam request form

- True
- False

Question 3 Identifies the patient properly

- True
- False

Question 4 Documents relevant history.

- True
- False

Question 5 Adjusts for trauma/patient condition when necessary

- True
- False

Question 6 Asks appropriate questions regarding pregnancy for females of appropriate age. (If patient was MALE, please select "TRUE".)

- True
- False

Question 7 Care is age appropriate and within department protocol

- True
- False

Question 8 Performs a proper introduction and consistently talks to patient in a professional manner throughout exam

- True
- False

Question 9 Provides for patient's privacy and comfort

- True
- False

Question 10 Explains exam to patient and provides clear instructions regarding dress etc.

- True
- False

Question 11 Demonstrates proper equipment operation

- True
- False

Question 12 Ensures appropriate marker is in the light field and is out of anatomical area of interest

- True
- False

Question 13 Performs exam in a logical sequence and timely manner

- True
- False

Question 14 Selects and maintains proper SID

- True
- False

Question 15 Selects correct image receptor orientation and placement (table/bucky); properly collimates

- True
- False

Question 16 Selects appropriate technical factors (mAs, kVp)

- True
- False

Question 17 Correctly centers central ray to the patient

- True
- False

Question 18 Correctly positions patient for exam

- True
- False

Question 19 Appropriately utilizes ALARA principle; time, distance, and shielding; wears film badge

- True
- False

Question 20 Displays images correctly

- True
- False

Question 21 Critiques images for position accuracy

- True

False

Question 22 Critiques images for radiographic quality

True

False

Question 23 The student demonstrated competency on this exam.

True

False

Question 24

1. Type the name of the competency performed.

2. Enter the accession/exam identification number.

3. Also, please comment on the student's performance. IF COMPETENCY WAS **NOT** DEMONSTRATED, PLEASE DESCRIBE HERE:

Question 25

By typing my name and credentials, I certify that I tested this student on this exam:

Strategy IV: In-Service Education

In-service education is to aid in the orientation of the student to the hospital-radiology environment and to orient them to procedures that take place in that environment in addition to those activities emphasizing mastery of entry-level radiographic competencies. In-service education for the student radiographer will take place during each clinical education course. The in-services will be non-tested focusing more on attendance and participation. A non-tested in-service activity requires the student to complete the specific objectives of that in-service prior to the end of the semester for that clinical education course. The following are the in-service activities for the various clinical education courses throughout the Program period:

CL. ED. I: Hospital-Radiology Dept. Orientation
 Fire & Electrical Safety
 Surgery Orientation
 Isolation/Infection Control
 Vital signs and patient assessment
 Oxygen Administration
 Radiographic Equipment and Safety
 Patient Transfer

CL. ED. II: C-arm/Surgery Techniques
 Portables
 Venipuncture Module and Testing
 Vital Signs/Emergency Procedures- Code Blue/Contrast reaction

CL ED. III through V: C-arm/Portable Review
 Isolation Technique/Infection Control
 Surgical Asepsis/Sterile Technique

Patient Assessment Procedures
Special Procedures/Specialty Areas
Trauma Radiography
Vital Signs/Oxygen Administration Review
QA Project Orientation
CR/DR Imaging

CL ED. VI: Immobile & Trauma Studies/Pediatric Studies/ Positioning Review

Fire and Electrical Safety Education

The primary strategy of these education modules is to familiarize the student with the clinical facility chemical fire, and electrical safety procedures so that students are capable of performing proper procedures and/or responses in the case of a fire or electrical hazard.

Upon completion of the fire and electrical safety in Moodle the student will be able to:

Fire Procedures

- Describe the factors which influence the response to a fire in a hospital.
- Name the priorities of hospital fire procedures.
- Describe actions taken to protect patients during a fire.
- Explain methods of fire containment.
- Identify actions taken in reporting a fire.
- Describe actions taken to extinguish a fire.
- Identify actions performed during an evacuation.

Electrical Safety

- Describe the role of insulation in keeping electrical current safe.
- Describe how a person can keep from grounding himself.
- Describe how to prevent the conduction of electricity from one person to another.
- Describe a situation in which a metal object such as a bedside stand, can conduct electrical current.
- Identify two actions that can be taken to prevent electrical shock.
- Identify the relationship between the moisture of the skin and the ability of the skin to conduct electrical current.

Chemical Safety

1. Do not eat or drink in the lab where chemicals are being used.
2. If a student has any physical contact with a chemical an instructor must be notified immediately. If the chemical contacts a student's skin or is ingested, the instructor will consult the MSDS for that specific chemical. Proper steps will be taken to ensure emergency procedures are followed as outlined by the MSDS. The school nurse will be consulted immediately and if necessary the student will seek additional medical care.
3. Protective equipment should be utilized if contact with chemicals is possible. Gloves, protective eyewear and aprons are available for student use.
4. Students should not work with any chemicals unless in the presence of a faculty member.
5. Chemical Fires:
 - a. Remain calm, call 911

- b. Never allow a fire to come between you and an exit
- c. Evacuate your area if you are unable to put out the fire
- d. Do not break windows. Oxygen feeds fires, only break a window as a last resort.
- e. Do not return to the emergency area until instructed to do so by fire or emergency personnel.

Intravenous Patient Care Procedures in Emergency Department Rotation Education

The primary strategy of this entry-level IV education is to familiarize the student with intravenous patient care procedures so that the student becomes more confident and adept at handling patients in the radiology department who have I.V.'s in place.

During an assigned ED clinical rotation the student will receive supervised instruction in intravenous patient care procedures to include:

Change the height of I.V. containers in relationship to the patient when required.

Identify the mechanical properties of flow control clamps.

Identify ancillary devices such as filters, tubing, clamps, locks, bottles, bags, etc.

Identify an obstruction in the tubing such as a kink closed clamp, etc.

Identify a slow running I.V. as a possible first indication of an infiltration.

Call the patient's nurse when there are any doubts about a patient's I.V.

Surgery Education

One primary strategy of the surgery clinical rotation is to familiarize the student with the surgery department; the location, the personnel, and the various areas located within the department so that the student has a basic understanding of the surgery department when called upon to assist registered radiographers in surgery.

Specific Objectives: Surgery

Supervised instruction of the student in the surgery rotation will include these objectives:

Locate the department or surgery.

Identify surgery personnel and function.

Identify location of surgery suite.

Identify location of recovery room.

Identify location of dressing room area.

Learn how to properly dress for radiographic surgical procedures.

Learn how to effectively enter and exit or work within the confines of the sterile surgical environment while patients are undergoing various types of surgical procedures.

Learn how to prepare and operate portable x-ray equipment for surgery considering proper medical asepsis procedures and ancillary equipment requirements.

Immobile and Trauma Patient Radiography

The primary strategy of this in-service is to provide the student with information to facilitate the learning process for immobile and trauma patient radiography in relationship to those routine radiographic procedures presently being completed or having been completed as identified didactically and/or clinically prior to this experience.

Radiographing immobile and trauma patients are considered advanced radiographic procedures which require a combination of techniques and experience beyond the professional entry-level. Students are encouraged to learn as much about the particular techniques for radiographing immobile and trauma patients that are presented for this in-service. And, when opportunities present themselves, students are encouraged to observe and assist in such procedures so that they gain a minimum background-experience level of understanding and/or competence which will be of significant value upon gaining immediate employment after graduation or upon advancing to further one's education in other areas of radiography or radiologic technology.

Strategy V: Quality Assurance

Quality assurance for Clinical Education I, II, and III will be based on the student's understanding and comprehension of radiographic technique. The student will be required to keep updated technical factors for exams being covered in class. These techniques are to be recorded in a technique manual purchased by the student. The clinical coordinator will periodically check the manuals for completeness. The student will also be required to have a basic knowledge of technical factors during simulation and competency testing. The student will be graded on knowledge of technical factors during simulation exams, competency exams, and during the final exam at the end of each clinical course.

Specific Objectives for Testing on Radiographic Technique

Upon completion of Clinical Education I through III, the radiologic technology student will be tested on radiographic technique including radiographic equipment and the use of ancillary devices. The tests will include the student's ability to demonstrate:

1. Proper manipulation of the equipment such as tube, table, generator, etc.
2. Proper room set up for a variety of procedures incl. fluoroscopy and tomography.
3. Knowledge and correct use of ancillary devices such as calipers, angle ruler, grids, grid holder, sponges, etc.
4. Knowledge and proper setting of the following technical factors: kVp, mA, time, distance or density settings for all radiographic procedures that have been taught thus far in didactic classes.

FOCAL SPOT SIZE CHECK

Given the appropriate equipment and instructions, the student will be able to assess and document the nominal focal spot sizes of each radiographic tube in the department once per 3 week rotation. Results will be turned in to the clinical education coordinator at the conclusion of the rotation.

ROOM CHECK

Given the appropriate form for the room check list as supplied by the clinical education coordinator/clinical instructor, the student will accomplish specific objectives and will be expected to check the condition of each of the following items in five (5) radiography rooms: cables, overhead lights, collimator lights, bucky tray, bucky locks, ionization chamber, T.V. monitor, control panel, table control switches, fluoro tower/tube, tube locks.

REPEAT FILM ANALYSIS

In conjunction with the clinical instructor, the student will:

1. Determine, according to examination type and reason for repeat due to: overexposure, underexposure, positioning error, motion, other.
2. Determine total number of repeats by that student for the particular month by referring to exam log book.

3. Determine if a particular radiographic room/machine or error was prevalent.
4. The student will record all data on the appropriately in the procedure log book upon completion of all exams and the student will turn in all records to the clinical education instructor/coordinator.

Strategy VI: Review/Rotation Activities and Skills

REVIEW SKILLS/ACTIVITIES - During each clinical course the student will be required to complete a specified number of review activities and skills. These activities/skills have been chosen to correlate with areas the student needs to stay proficient in to be successful in the clinical setting. As the student completes each skill/activity the supervising technologist will initial the appropriate area on the clinical activity form. These skills are designed according to the student's clinical level. A completed form will be turned in for a grade at the completion of each clinical course. Skills will be evaluated by required impromptu competencies starting in Semester IV.

ROTATION SKILLS/ACTIVITIES- The student will be required to complete a specific number of skills for each assigned rotation in clinical education. These skills are designed to familiarize the student with areas in the rotation they must master to be proficient. Rotation skills are divided into experience levels for clinical I-III and Clinical IV-VI. Each rotation has different skills according to the assigned area. The student must complete the rotation skills assigned to each area.

Strategy VII: Specialty Imaging Rotations/ Multiple facilities with a variety of advanced modalities

The specialty imaging rotations are designed to provide a learning opportunity to the student in current and developing imaging and therapeutic technologies. Each rotation has specific objectives and evaluations which must be completed by the student. The following areas are available at various clinical sites:

Nuclear Medicine

Sonography

Magnetic Resonance Imaging

Cardiopulmonary

Special Procedures

Radiation Therapy

Positron Emission Tomography

Dexi-Scan

CT

Orthopedic Radiography

The multi-modality rotations are designed to give the student a broad background in different areas in health care. These areas include nursing, EKG, and phlebotomy/lab.

Strategy VIII: Strategy Student Assessment / Technologist Evaluation

The primary strategy of student assessment is to provide feedback by way of grade determination for all previously identified STRATEGIES and objectives at MID-TERM and FINALS. Included with this grade determination the clinical education coordinator/clinical instructor will conduct a MID-TERM and FINALS supervisory evaluation.

The supervisory evaluation as identified in Figure 4, is designed to rate each student radiographer in terms of those professional attributes considered important in becoming a professional entry-level radiographer. Input from those radiographers and affiliate supervisors working with the student during each two week rotation is incorporated in this process. Due to the nature of the subjectivity for rating students using such an instrument, the percentage grade breakdown will only be weighted at no more than 10 percent of the total MID-TERM and FINALS grade for a

clinical education course. The areas to be considered for using the supervisory evaluation instrument in rating the professional attributes of the student radiographer by the clinical education coordinator/clinical instructor include (Figure 4 follows):

Attendance	Patient Care and Ethics
Dependability	Attitude & Communication
Quality of Work	Prioritizes Work
Safety Consciousness	Adaptability
Professional Appearance & Behavior	Teamwork Approach

Once the supervisory evaluation is completed it is presented to the appropriate student and the clinical education coordinator/clinical instructor will go through the evaluation instrument and give concrete examples for the student's strengths or weaknesses in the previously identified areas. Once the student and clinical education coordinator reach agreement to the overall general acceptance of the evaluation, the clinical education coordinator and the student will sign and date the evaluation instrument. It then becomes part of the student's records and may be used for future comparison of improvements throughout clinical education.

SPECIFIC OBJECTIVES OF STUDENT ASSESSMENT

Given the progression by the student towards achieving the STRATEGIES and specific objectives as identified and specifically stated in this syllabus, each student will receive a MID-TERM and FINAL assessment in the form of a letter grade (A through F), which is designed to provide important feedback to the student.

ROTATION ASSESSMENT

The student will receive a rotation evaluation assessment tool following completion of each clinical rotation. The supervising technologist for that rotation will fill out the appropriate form and review it with the student. Figure Demonstrating the Performance Evaluation for Clinical Education is used for Clinical I-VI courses.

Grade Percentage:

92 - 100 = A

83 - 91 = B

75 - 82 = C

0 - 74 = F

Staff/Preceptor Rotation Evaluation

The student will evaluate each rotation and the technologist that they work with following every rotation. See the Figure used for the evaluation tool by the student; Clinical Instructor/Preceptor Evaluation. This evaluation tool remains anonymous.

Clinical Site Evaluation

The student will evaluate their assigned clinical site each rotation. See the Figure used for the evaluation tool by the student; Clinical Site Evaluation. This evaluation tool remains anonymous.

FIGURE 4
CASPER COLLEGE RADIOGRAPHY PROGRAM: revised 2005
MIDTERM STUDENT CLINICAL EVALUATION

STUDENT NAME: _____

EVALUATING INSTRUCTOR: _____

DATE/SEMESTER: _____

The instructor will evaluate the student's clinical performance and progress according to the scale below:

- 1 - Unsatisfactory-fails to meet accepted standards for clinical level
- 2 - Needs improvement- below accepted standards for clinical level
- 3 - Satisfactory- average performance- meets standards for clinical level
- 4 - Above satisfactory- above average performance for clinical level
- 5 - Outstanding- exceeds all standards for students clinical level

<u>ATTENDANCE:</u>	1	2	3	4	5
Punctuality					
Attendance in clinical rotations					
Notification of tardy or absences					
<u>Comments:</u>					

<u>DEPENDABILITY:</u>	1	2	3	4	5
Uses time appropriately					
Reliable- performs under normal supervision					
Is in assigned area for all exams					
<u>Comments:</u>					

<u>QUALITY OF WORK:</u>	1	2	3	4	5
Repeat rate normal for level of education					
Accuracy and thoroughness of work					
Organization of work area					
<u>Comments:</u>					

<u>QUANTITY OF WORK:</u>	1	2	3	4	5
Actively participates in assigned area					
<u>Comments:</u>					

<u>RADIATION PROTECTION:</u>	1	2	3	4	5
Conscious of self and others in radiation practices					
Understands equipment and uses it properly in radiation safety					
<u>Comments:</u>					

<u>ATTITUDE TOWARD CLIN. EDUCATION:</u>	1	2	3	4	5
Works as team member					
Accepts responsibility appropriate to student level					
<u>Comments:</u>					

Instructor comments related to areas of needed improvement:

Instructors comments related to areas that student excels:

Student's comments and goals for the remainder of the semester:

Instructor signature: _____

Clinical Coordinator signature: _____

Student signature: _____

Performance Evaluation for Clinical Education Preceptor/Staff Evaluates Student

1 Professional appearance: (cleanliness, grooming and proper attire).

Always exceptionally neat and well groomed. Always wears appropriate attire.

2 Professional Appearance Comments:

3 Dependability / Reliability: Attendance Student was present, or informed the proper personnel if absent.

4 Arrives to work prepared and on time.

5 Dependable / reliable (completes assignments with minimal direction, trustworthy, credible, responsible).

Is always dependable and skillfully completes tasks.

6 Dependability/Reliability Comments:

7 Teamwork: Functions effectively as a member of the healthcare team.

Excellent team worker, effectively consults, integrates and shares information with team members.

8 Contributes to a positive environment within the department (likable, friendly, helpful, loyal).

Exceptionally friendly, helpful, loyal and always speaks with good purpose.

9 Accepts supervision and works effectively with supervisory personnel (accepts constructive criticism and guidance).

Always seeks constructive feedback, accepts guidance, and changes behavior for personal improvement. Student is willing to help others and never refuses to do an exam.

10 Appropriately interacts with patients (courteous, thoughtful, empathetic, displays patience, and non-judgmental).

Always demonstrates respect, sensitivity and consideration for others, consistently anticipates and attends to patient's and family's needs for comfort and help.

11 Conducts himself/herself in an ethical and professional manner (displays integrity, sincere and applies discretion).

Always exhibits concern for the dignity and welfare of patients and team members; prevents conflict of interest; always takes measures to deal with conflict effectively.

12 Teamwork Comments:

13 Communication: Communicates effectively within the healthcare setting (communicates appropriate information, applies confidentiality, uses appropriate medical terminology).

Always communicates in a concise manner; relating appropriate and complete information; always maintains confidentiality.

14 Speaks in a professional manner. Introduces self to patient and explains exam in understandable terms.

15 Communication Comments:

16 Quality of Work: Efficient planning and management of time (prioritizes work, adapts to changing workload and completes assignments on time).

Plans ahead, always works efficiently and manages time wisely.

17 Is self-directed and responsible for his/her actions.

Is self-directed and manages work responsibly. Remains motivated and enthusiastic throughout rotation.

18 Confident in abilities, exercises good judgment and maintains composure in stressful situations.

Self-confident, always seeks assistance when appropriate, respects professional boundaries and remains calm in stressful situations.

19 Participates in educational activities that enhance clinical performance.

Readily initiates learning activities and participates willingly in learning activities

20 Quality of Work Comments:

21 Critical Thinking: Radiation safety

Demonstrates awareness of radiation safety procedures for self and others.

22 Able to utilize critical thinking skills appropriate to student level.

Always strives for quality radiographs, demonstrates continued competence on previously evaluated clinical procedures.

23 Exhibits logical thought in making decisions.

Student is able to complete exams under varying degrees of difficulty and can adapt to patient needs. Respects patient confidentiality. Asks for help when necessary.

24 Critical Thinking Comments:

25 Overall / General Comments:

26 By typing my name and credentials, I certify that I filled out this evaluation

Student Evaluates Preceptor/Staff

1 Name of technologist you evaluated.

Clinical Experience

2 **Clinical Instructor / Preceptor was readily available when needed, and followed the policy with regard to direct and indirect supervision.**

3 **Clinical Instructor / Preceptor provided adequate orientation to assigned clinical areas and procedures**

4 **Clinical Instructor / Preceptor provided adequate instructions and arranged clinical experiences sufficient for me to complete my assigned objectives.**

5 **Clinical Instructor / Preceptor was organized, and guided the learning experience in a way that was helpful to me.**

Preceptor Knowledge/skills

6 **Clinical Instructor / Preceptor was sufficiently knowledgeable to provide student instruction.**

7 **Clinical Instructor / Preceptor demonstrated appropriate medical asepsis and safety methods in the health care setting.**

8 **Clinical Instructor / Preceptor provided adequate demonstration of clinical procedures and equipment**

operations.

9 Clinical Instructor / Preceptor was able to explain difficult concepts and to help me apply lecture and laboratory information in clinical practice

10 Any comments concerning the Clinical Instructor/Preceptor's degree of knowledge?

Supervision/Performance evaluation

11 Clinical Instructor / Preceptor was impartial, consistent, and fair in their evaluation of student performance.

12 Clinical Instructor / Preceptor provided timely and appropriate supervision of my clinical activities, and answered questions promptly and clearly.

13 Clinical Instructor / Preceptor provided constructive review and positive reinforcement of my clinical performance

14 Clinical Instructor / Preceptor helped me to develop my problem solving capabilities.

15 Clinical Instructor / Preceptor enforced clinical policies and procedures

16 Clinical Instructor / Preceptor delegated responsibility consistent with the student's degree of learning and ability.

Supervision comments

17 Any comments concerning the Clinical Instructor/Preceptor's supervising skills?

Preceptor Behavior

18 Clinical Instructor / Preceptor was a competent clinician and a role model for professionalism.

19 Clinical Instructor / Preceptor was enthusiastic and encouraged my active participation.

20 Clinical Instructor / Preceptor interacted with me in an appropriate, welcoming, and non-threatening manner.

21 Clinical Instructor / Preceptor exhibited compassion in dealing with patients.

22 Clinical Instructor / Preceptor helped student develop effective communication skills with physicians and other members of the health care team.

23 Clinical Instructor / Preceptor was approachable and delivered any criticisms constructively.

24 Any comments concerning the Clinical Instructor/Preceptor's professional behavior?

25 What did you like best about this rotation?

- 26 What did you like least about this rotation?
- 27 What suggestions do you have to improve this rotation?

Clinical Site Evaluation

Facility

1 Please type the name of the facility you are evaluating.

Orientation

2 Upon your arrival at the clinical site, did the technologist give you a tour of the building?

3 Upon your arrival at the clinical site, did the technologist introduce you to other staff members?

4 Upon your arrival at the clinical site, did the technologist give you an overview of the equipment and processing?

5 Upon your arrival at the clinical site, did the technologist explain procedure/exam protocols?

6 Upon your arrival at the clinical site, did the technologist describe information regarding forms utilized by the facility?

7 Please type any comments regarding your orientation to the facility. **If you answered any question with "Seldom" or Never", please explain in detail here.**

SUPERVISION

8 Was the Clinical Instructor and/or the technologist you worked with available to you to answer questions?

9 Was consistent instruction given to you by the clinical Instructor and/or the technologist you worked with?

10 Did the Clinical Instructor and/or the technologist you worked with include you in as many exams as possible?

11 Did the Clinical Instructor and/or the technologist you worked with provide clear instructions about the work flow within the department?

12 Did the Clinical Instructor and/or the technologist you worked with aware of your knowledge and ability level to perform procedures?

13 Please type any comments regarding your supervision at the facility. **If you answered any question with "Seldom" or Never", please explain in detail here.**

FACILITY

14 While at this facility, were you exposed to a wide variety of exams?

15 Did this facility provide a positive learning environment?

16 Please type any comments regarding the facility. **If you answered any question with "Seldom" or Never", please explain in detail here.**

17 Please type any additional comments or suggestions here:

STRATEGY IX: Final competency

The final competency is used as the final assessment of the student's clinical ability. Therefore, it is not administered until Clinical Education VI.

Objectives

Given 7 radiographic projections plus one trauma projection, the radiography student with 85% accuracy will be able to:

1. Perform any given projection from the following areas within a three-minute time frame:
 1. Upper extremities - long bones
 2. Upper extremities - joints
 3. Lower extremities - long bones
 4. Lower extremities - joints
 5. Thorax
 6. Abdomen
 7. Contrast Exams
 8. Spine
 9. Skull
 10. Facial Bones
 11. Trauma Selection

Practical = 20% of final grade in Clinical Ed V

In case the student does not attain 85%, the student will continue to retake the final Competency Practical until performing the exam at a level of 85% or greater. The average of all attempts and the successful final competency will be used for that grade component. Additional Clinical Education may be necessary for some students to demonstrate competency. If the practical is not completed by the stated deadline, the student will receive a grade of incomplete for that semester. Until such time that competency is demonstrated, the student will not graduate.

2. Complete a written examination over radiographic projections selected by the Program Faculty. Questions may pertain to any subject taught in the entire curriculum.

Film Critique /Written Portion = 20% of final grade in Clinical Ed VI

The final Competency will incorporate a majority of that which has been previously studied by the Radiography student. The final Competency will require knowledge of any or all of the following areas:

Positioning Procedures		Red. Protection and Biology Radiographic Pharmacology
Exposure and Imaging	Pathology	
Processing	Anatomy and Physiology	Communication
Radiation	Patient Care	Problem solving

DEADLINE

MARCH Students will schedule time for practical evaluation with the clinical coordinator and for the oral examination with the program director. This will be scheduled after midterm as indicated in the in the Clinical Education VI syllabus.

GRADE COMPONENTS

Final Competency Practical (lowest acceptable performance is 85%)	20%
Written (lowest acceptable grade 85%)	<u>20%</u>
TOTAL	40% of final grade in Clin. Ed. VI

Strategy X: CLINICAL EDUCATION ROTATION KEY- Revised 01/10

FIRST YEAR ROTATIONS: Summer rotations are Monday-Friday – see clinical rotation schedule

Rotation	Days-Fall/Spring	Times - Fall/Spring	Summer-Mon-Friday
ED- Emergency Dept. -BWMC (or outside hospital)	Summer Only	NA	7:30-4:00
Trans.- Transport-BWMC (or outside hospital)	Summer Only	NA	7:30-4:00
4/1- BWMC room 4 and 1	Thursday/Friday	7:30-12:30	7:30-4:00
CHCCW- Community Health Center of Central Wyoming	Thursday/Friday	8:00-1:00	8:00-3:30
MESA	Thursday/Friday	8:00-1:00	8:00-4:00
BWMC-Portable	Thursday/Friday	5:00a.m.-10:00 a.m.	5:00-12:30
BWMC-Rm 2	Thursday/Friday	7:30-12:30	7:30-3:30
BWMC-Rm 3	Thursday/Friday	7:30-12:30	7:30-3:30
Trauma Rotation – BWMC (or outside hospital)	Thursday/Friday	5:30p.m.-10:30p.m.	Mon-Thurs. 4:00 pm-1:00 am
CT- BWMC (or outside hospital) Computerized Tomography: 3 rd Semester	Thursday/Friday	7:30-12:30	7:30-3:30
Surg.- BWMC Surgery	Thursday/Friday	7:30-12:30	7:30-3:30
Surgical Center (Wyoming Surgical Center)	Thursday/Friday	7:30-12:30	7:30-3:30
Converse County Hospital-Douglas	Thursday/Friday	8:00-1:00	8:00-4:00
Outpatient Radiology Clinic- Washington and 3 rd Street	Thursday/Friday	8:00-1:00	8:00-4:00
Afternoon PM-BWMC	Thursday/Friday	12:30-5:30	NA
BWMC East Clinic	Thursday/Friday	8:00-1:00	8:00-4:00
Room 1 BWMC	Thursday/Friday	7:30-12:30	7:30-3:30
Simulation Lecture/Testing CC	Monday or Tuesday	Fall/Spring TBA	See Schedule
Western Medical Associates	Thursday/Friday	8:00-1:00	8:00-4:00
Night Shift Optional: Request through Instructor	Thursday/Friday	10:30 pm-3:30 am	

SECOND YEAR CLINICAL ROTATIONS-Summer rotations are Monday-Thursday

Rotation	Days-Fall/Spring	Times Fall/Spring	Summer Mon.-Thurs
I-BWMC room 1	Monday, Tuesday, Wednesday	7:30-3:30 7:30-11:00	7:30-3:30
SP- BWMC Special Procedures	Monday, Tuesday, Wednesday	7:30- 3:30 7:30-11:00	7:30-3:30
RT-Rocky Mountain Oncology Center Radiation Therapy	Monday, Tuesday, Wednesday	8:00-4:00 8:00-11:30	8:00-4:00
NM-BWMC Nuclear Medicine	Monday, Tuesday, Wednesday	7:30-3:30 7:30-11:00	7:30-3:30
4/1- BWMC room 4 & 1	Monday, Tuesday, Wednesday	7:30-3:30 7:30-11:00	7:30-3:30
US- BWMC/CMI Ultrasound	Monday, Tuesday, Wednesday	8:00-4:00 8:00-11:30	8:00-4:00
CHCCW- Community Health Center of Central Wyoming	Monday, Tuesday, Wednesday	8:00-4:00 8:00- 11:30	8:00-4:00
Portable/BWMC	Monday, Tuesday, Wednesday	5:00a.m-12:30 5:00a.m-8:30	5:00a.m. – 1:00p.m.
Rm 2- BWMC	Monday, Tuesday, Wednesday	7:30-3:30 7:30-11:00	7:30-3:30
Rm 3- BWMC	Monday, Tuesday, Wednesday	7:30-3:30 7:30-11:00	7:30-3:30
Trauma Rotation - BWMC	Monday, Tuesday, Wednesday	3:30pm.-11:30p.m. 4:30 pm-8:00	3:30 pm-11:30
CT- Computerized Tomography	Monday, Tuesday, Wednesday	7:30-3:30 7:30-11:00	7:30-3:30
Surg.-Surgery	Monday, Tuesday, Wednesday	7:30-3:30 7:30-11:00	7:30-3:30
Surg.-Wyoming Surgical Center	Monday, Tuesday, Wednesday	7:30-3:30 7:30-11:00	7:30-3:30
Converse County Hospital- Douglas	Monday, Tuesday, Wednesday	8:00-4:00 8:00-11:30	8:00-4:00
Outpatient Radiology Clinic- 3 rd Street	Monday, Tuesday, Wednesday	8:00-4:00 8:00-11:30	8:00-4:00
MRI- WIC Magnetic Resonance Imaging	Monday, Tuesday, Wednesday	7:30-3:30 7:30-11:00	7:30-3:30
CP- WMC Cardiopulmonary	Monday, Tuesday, Wednesday	7:30-3:30 7:30-11:00	7:30-3:30
BWMC East Clinic	Monday, Tuesday, Wednesday	8:00-4:00 8:00-11:30	8:00-4:00
Simulation Casper College	Thursday TBA		TBA
Western Medical Associates	Monday, Tuesday, Wednesday	8:00-4:00 8:00-11:30	8:00-4:00
Night Shift Optional: Request through Instructor	Monday, Tuesday, Wednesday	10:30 pm-6:30 am 10:30pm-2:00 am	

Clinical Education Sites

Blackrock Advanced Medical Imaging 307-682-8228
Campbell County Memorial Hospital (CCMH) 307-688-1000
Outpatient Radiology Center of Casper (OP) 307-232-5003
Community Health Center of Central Wyoming (CHCCW) 307-233-6000
Converse County Hospital (CCH) 307-358-2122
Mesa Urgent Care (BWMC) 307-233-7296
Sheridan Memorial Hospital (SMH) 307-672-1050
Summit Medical Center 307-232-6600
Western Medical Associates (WMA) 307-577-5100
Wyoming Imaging Center (WIC)
Banner Wyoming Medical Center (WMC) 307-577-2383
Banner Wyoming Medical Center East (WMC Clinic) 307-266-4000
Wyoming Surgical Center 307-472-8780

Clinical Site Policies and Procedures

Students are expected to know the protocol for each procedure both for simulation and competency testing purposes for the appropriate clinical site.